

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/863,777

DATE: 06/12/2001
TIME: 14:55:26

Input Set: A:\Amseqlst.asc
Output Set: N:\CRF3\06122001\I863777.raw

7 <110> APPLICANT: Fett, James W.
8 Olson, Karen A.
10 <120> TITLE OF INVENTION: Antisense Inhibition of Angiogenesis Expression
12 <130> FILE REFERENCE: 10498/05286
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/863,777
C--> 16 <141> CURRENT FILING DATE: 2001-05-23
18 <150> PRIOR APPLICATION NUMBER: 60/041182
20 <151> PRIOR FILING DATE: 1997-03-21
22 <160> NUMBER OF SEQ ID NOS: 10
24 <170> SOFTWARE: PatentIn Ver. 2.0
28 <210> SEQ ID NO: 1
30 <211> LENGTH: 4668
32 <212> TYPE: DNA
34 <213> ORGANISM: Homo sapiens
36 <220> FEATURE:
38 <221> NAME/KEY: CDS
40 <222> LOCATION: (13(9)..(2252))
42 <400> SEQUENCE: 1
44 tggtttgcaatt aagttcattg attataaatt gtaattggaat caacacacaaa tgcaaatlag 60
46 aaagagagagc caatttgcct acccagtcac gtcttcccat gtaaccatag aacgttgggg 120
48 tccgtgtgtct tctagatccc acagtcttgc tctcagaaca ggctagcccac accacagggc 180
50 tagtgccagg acccatggcc tttttttaag ctccagactcc cttctgtgaa cagcaatata 240
52 cccacaaactt gtacaacatt ggtgcttctt gcaagggcta cagaactatt tgatacgaaa 300
54 atgttcattg acttacacac aagagaagca caaaataaaa aattaataat taatttaaty 360
56 tctttgaaaa tgtaccattt atttttacat ttggggctcat aagaattgta ttacacttaa 420
58 gaatgcaata caatttgaag atcagatctt tctccctttg tgagaatttc tcagtatgtg 480
60 tgatgactac caagaaatca tagccagtcg tgaattcagt gagttactca taaacgaaca 540
62 agaaccacct acttcttggg gaggttaggtc tgcctccctt caactcagga tacaactgct 600
64 ttcaactgct ttcttcacat tagctgacta attagctaga agcctgttgt aaacaatttt 660
66 atggttgaat ccttccctgg gctcaggytt cctagaaca gagaggtccc caaatcccg 720
68 tctgtggcct gtcgcctaa gctctgcctc ctgccagatc agcaggcage attagattct 780
70 cataggagct ggacgcctat tgtgaactgc gcatgtgcgg gatccagatt gtgcactctt 840
72 tatgagaatc taactaatgc ttgatgatct atctgaacca gaacatttc atcctgaaac 900
74 catcccccac caatccatag aaatactgtc ttccacaaaa atgatccctg gtgcccacaaa 960
76 tgttagagac cactccctta aaactctctt cttagctctc acctcctgta ttactatctc 1020
78 atctcagtag attgaagccc ccatcttttc ccatggatg cctcatttcc tattagggag 1080
80 gcattttttt attttttttt tttattttt tccgagacgg agtctcgtc tgcgcacaa 1140
82 ctggagtgat agtggcgaga tctcggtcca ctgcaagctc cgtctcccg gttcagccca 1200
84 ttctcctgac ccagcctccc aagtagctgg gactacaggg gccgcacta cgcgcggcta 1260
86 attttttgta tttttagtag agacggggtt tccaggtggt agccaggtg gtctcgatct 1320
88 cctgacctcg tgatccgccc gcttggcct cccaaagtgc tgggattaca ggcgtgagac 1380
90 cgcgcgcggc cgtcatttgg tatgtcttaa tgtgcctcag gacctagcac agtccctggt 1440
92 acccagtaga gacctatgta atgttcgtta ttcaataata aatacatgaa ttaaagagt 1500
94 agagtggatt ttgtaattt acgactgata gagaaatact cagtgtattt aagggatgg 1560
96 gaagaacggg tggagctaga ggttggctc aggaaactat taaatagacg ttccgcagga 1620
98 agggattgac gaagtgttag gttaatgagg aagggaatat agaataataa atttggtggt 1680
100 gaaaaagatc tgattcatga tgcctgtgta gagagcaaag ctctgtctct tttggcctaa 1740

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/863,777

DATE: 06/12/2001

TIME: 14:55 26

Input Set : A:\Amseqlst.asc

Output Set: N:\CRF3\06122001\I863777.raw

```

102 ttgtgtgatg ctgtttcttg gtctaccaca cctccctttg cctccgcag gaggctgtgt 1800
104 tgaagag atg gtg atg ggc ctg ggc att ttg ttg ttg gtc ttc gtg ctg 1850
106 Met Val Met Gly Leu Gly Val Leu Leu Val Phe Val Leu
107 1 5 10
111 ggt ctg ggt ctg acc cca cgg acc ctg gct cag gat aac tcc agg tac 1898
113 Gly Leu Gly Leu Thr Pro Pro Thr Leu Ala Gln Asp Asn Ser Arg Tyr
114 15 20 25 30
117 aca cac ttc ctg acc cag cac tat gat gcc aaa cca cag ggc cgg gat 1946
119 Thr His Phe Leu Thr Gln His Tyr Asp Ala Lys Pro Gln Gly Arg Asp
120 35 40 45
123 gac aga tac tgt gaa agc atc atg agg aga cgg ggc ctg acc tca ccc 1994
125 Asp Arg Tyr Cys Glu Ser Ile Met Arg Arg Arg Gly Leu Thr Ser Pro
127 50 55 60
130 tgc aaa gac atc aac aca ttt att cat ggc aac aag cgc agc atc aag 2042
132 Cys Lys Asp Ile Asn Thr Phe Ile His Gly Asn Lys Arg Ser Ile Lys
133 65 70 75
136 gcc atc tgt gaa aac aag aat gga aac cct cac aga gaa aac cta aqa 2090
138 Ala Ile Cys Glu Asn Lys Asn Gly Asn Pro His Arg Glu Asn Leu Arg
139 80 85 90
142 ata agc aag tct tct ttc cag gtc acc act tgc aag cta cat gga ggt 2138
144 Ile Ser Lys Ser Ser Phe Gln Val Thr Thr Cys Lys Leu His Gly Gly
145 95 100 105 110
148 tcc ccc tgg cct cca tgc cag tac cga gcc aca gcc ggg ttc aga aac 2186
150 Ser Pro Trp Pro Pro Cys Gln Tyr Arg Ala Thr Ala Gly Phe Arg Asn
151 115 120 125
154 gtt gtt gtt gct tgt gaa aat ggc tta cct gtc cac ttg gat cag tca 2234
156 Val Val Val Ala Cys Glu Asn Gly Leu Pro Val His Leu Asp Gln Ser
157 130 135 140
160 att ttc cgt cgt cgg taa ccagcgggcc cctgggtcaag tgetggctct 2282
162 Ile Phe Arg Arg Pro
163 145
167 gctgtccttg ccttccattt cccctctgca ccagaaacag tgggtggcaac attcattgcc 2342
169 aagggcccaa agaaagagct acctggacct ttgttttct gtttgacaac atgtttaata 2402
171 aataaaaaatg tcttgatata agtaagaate agagtcttct cactgattct gggcatattg 2462
173 atctttcccc catcttctct acttggtctg tccctgagag gactgcatag gatagaaatg 2522
175 ccttttctct ttcttttctg ttttttttt ttttttttt gagatggagt ctactctgt 2582
177 cggccaggct taagtgaat ggcacaatct cggctcactg caacctctct ctctgggtt 2642
179 caagtgtatc tctgctca gctcccaaa tagctgagat tacaggcatg caccaccaca 2702
181 cctggctaatt ttttgtgtt ttagttaga cagggtttca cgttttggc caggttggct 2762
183 ttgaactcct gacctggga gatccgcca ccttgacctc tctttgtgct gggattacag 2822
185 gcatgagcca ctgagccggg ccacttttct cttatcagtc agtttttaca agtcattagg 2882
187 gaggtagact ttacctctct gtgaaggaaa gtatggtatg ttgatctaca gagagagatg 2942
189 gaaaaattcc agggctgta gctactaagc agaatttcca agataggcaa attgtttttt 3002
191 ctgtcaaata ataagetaat attacttcta caaatatgag accttggaga gaagtttcca 3062
193 aggaccaagt accaacatac caacagatta ttatagtctc tctactctt acacacacac 3122
195 acacacatat acacatatgt aatccagcat gaataccaaa attcattcag ggtagccacc 3182
197 ttttgtctta atcgagagat aattttgatg ttggaatgga atgctcccag gatattctct 3242
199 tgtcatggtt attttatata aaattcaaaa accaattaca ttatttctc tgtaattctt 3302
201 tactttatca actaatgtct ggcaagtgtg atgttttggg gaagttatag aagattccgg 3362

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/863,777

DATE: 06/12/2001

TIME: 14:55:26

Input Set : A:\Amseq1st.asc

Output Set: N:\CRF3\06122001\I863777.raw

```

203 ccagggcgctt atctcacgct tctaatccag cacttttggga agctgagggc gacagatcac 3422
205 gaggtcaaga gatcaagacc atcctggaca acatggtgaa accttgtctc tactaaaaat 3482
207 gtgaaaatta gctgggcgtg qtggcacaca cctatagtcg cagctactcg qqagcctgag 3542
209 gcaggagaat cctttgaacc taggaagcgg aggttgcact gagccgagat cagcccastg 3602
211 cactccagcc ttggcgacag agcagagactc cacttcaaaa aaaaaaaaaa aagaaagatc 3662
213 ccagttttat ccagttttat ccttatttct cctcaattct caagattttg tttaagttta 3722
215 acataactta ggttaacaca ctctttgtta aatacactgt tcaatctaca gactcagtgg 3782
217 tttagcttctt gtttaactaat ttctgtttgac aggtacttgg atatittatt tagaaagtgg 3842
219 ttgccaataa attagttata agtcgccagt ttcactgcct tctgaacaca taattattgt 3902
221 ggtctcagta ttccttatgg tggcttctcc tgctcctggt attgccctga aatgggccaa 3962
223 aagccgtggc tcccgaatgc tcagggttata gaacattgtc caggtaccac ctaggagagc 4022
225 ccagcctcac tgaagtatt caaatttagg aatgggtttg agaagtaggt agctggtatg 4082
227 tgettagcac aagaattctc ctctcttggg ttagtctgtt tcaaaaactga aaacactgtc 4142
229 attccttaa; aaatlaggaa aaagtattcc aaacctctgt cactagaaaa ttggccatat 4202
231 taccgaatct caaaaactc tcaggaaatg ajaaagtccc agttttctgt aaactatttg 4262
233 agcccttttc tcaagttctc ctcccaagtgc tatttctctg aggtgagga aagttactca 4322
235 agatcatcgc tggcactcaa ggccttgata gggaagtga aaggcatgga ccattattat 4382
237 attgacacaa gcataagctg tgaaaaccca catcttctcc aaacatctgc ttggagcatt 4442
239 atcatcgcct agtttgcctc qgtgttcagg gaaatcgcct ttccatagga aatcacatgg 4502
241 cagtgggatg gaagtgttcc ctgacctgcc gatggtaact gcacctgagc aagcatctct 4562
243 atctcttttt gttctgggac tcttgttcta tcacaaccac aagctgttta aaataaaaaa 4622
245 gtcgaagtcac aggcaggtca ttttactctg cgtgaatcaa ttgaag 4668

```

248 <210> SEQ ID NO: 2

250 <211> LENGTH: 147

252 <212> TYPE: PR1

254 <213> ORGANISM: Homo sapiens

256 <400> SEQUENCE: 2

```

258 Met Val Met Gly Leu Gly Val Leu Leu Leu Val Phe Val Leu Gly Leu
259 1 5 10 15
261 Gly Leu Thr Pro Pro Thr Leu Ala Gln Asp Asn Ser Arg Tyr Thr His
262 20 25 30
264 Phe Leu Thr Gln His Tyr Asp Ala Lys Pro Gln Gly Arg Asp Asp Arg
265 35 40 45
267 Tyr Cys Glu Ser Ile Met Arg Arg Arg Gly Leu Thr Ser Pro Cys Lys
268 50 55 60
270 Asp Ile Asn Thr Phe Ile His Gly Asn Lys Arg Ser Ile Lys Ala Ile
271 65 70 75 80
277 Cys Glu Asn Lys Asn Gly Asn Pro His Arg Glu Asn Leu Arg Ile Ser
278 85 90 95
280 Lys Ser Ser Phe Gln Val Thr Thr Cys Lys Leu His Gly Gly Ser Pro
281 100 105 110
283 Trp Pro Pro Cys Gln Tyr Arg Ala Thr Ala Gly Phe Arg Asn Val Val
284 115 120 125
286 Val Ala Cys Glu Asn Gly Leu Pro Val His Leu Asp Gln Ser Ile Phe
287 130 135 140
289 Arg Arg Pro
290 145
294 <210> SEQ ID NO: 3
296 <211> LENGTH: 18

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/863,777

DATE: 06/12/2001

TIME: 14:55:26

Input Set : A:\Amseqlst.asc

Output Set: N:\CRF3\06122001\I863777.raw

```

298 <212> TYPE: DNA
300 <213> ORGANISM: Artificial Sequence
302 <220> FEATURE:
304 <223> OTHER INFORMATION: Description of Artificial Sequence:
306     phosphorothioate oligodeoxynucleotide
308 <400> SEQUENCE: 3
310 gaagagatag tgaatggc 18
312 <210> SEQ ID NO: 4
314 <211> LENGTH: 18
316 <212> TYPE: DNA
320 <213> ORGANISM: Artificial Sequence
322 <220> FEATURE:
324 <223> OTHER INFORMATION: Description of Artificial Sequence:
326     phosphorothioate oligodeoxynucleotide
328 <400> SEQUENCE: 4
330 ggcattcac atctcttc 18
332 <210> SEQ ID NO: 5
334 <211> LENGTH: 18
336 <212> TYPE: DNA
338 <213> ORGANISM: Artificial Sequence
340 <220> FEATURE:
342 <223> OTHER INFORMATION: Description of Artificial Sequence:
344     phosphorothioate oligodeoxynucleotide
346 <400> SEQUENCE: 5
348 aaacggcatc atgaatca 18
350 <210> SEQ ID NO: 6
352 <211> LENGTH: 18
354 <212> TYPE: DNA
356 <213> ORGANISM: Artificial Sequence
358 <220> FEATURE:
360 <223> OTHER INFORMATION: Description of Artificial Sequence:
362     phosphorothioate oligodeoxynucleotide
364 <400> SEQUENCE: 6
366 ccaggggccc gctggtta 18
368 <210> SEQ ID NO: 7
370 <211> LENGTH: 18
372 <212> TYPE: DNA
374 <213> ORGANISM: Artificial Sequence
376 <220> FEATURE:
378 <223> OTHER INFORMATION: Description of Artificial Sequence:
380     phosphorothioate oligodeoxynucleotide
382 <400> SEQUENCE: 7
384 aacaaatttt atattcta 18
386 <210> SEQ ID NO: 8
388 <211> LENGTH: 18
390 <212> TYPE: DNA
392 <213> ORGANISM: Artificial Sequence
394 <220> FEATURE:
396 <223> OTHER INFORMATION: Description of Artificial Sequence:

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/863,777

DATE: 06/12/2001

TIME: 14:55:26

Input Set : A:\Amseqlst.asc

Output Set: N:\CRF3\06122001\I863777.raw

399 phosphorothioate oligodeoxynucleotide
401 <400> SEQUENCE: 8 18
402 cagggcccatc atcatcac
406 <210> SEQ ID NO: 9
408 <211> LENGTH: 18
410 <212> TYPE: DNA
412 <213> ORGANISM: Artificial Sequence
414 <220> FEATURE:
416 <223> OTHER INFORMATION: Description of Artificial Sequence:
417 phosphorothioate oligodeoxynucleotide
419 <400> SEQUENCE: 9 18
420 gcccgagccc atcaccat
424 <210> SEQ ID NO: 10
426 <211> LENGTH: 18
428 <212> TYPE: DNA
430 <213> ORGANISM: Artificial Sequence
433 <220> FEATURE:
435 <223> OTHER INFORMATION: Description of Artificial Sequence:
436 phosphorothioate oligodeoxynucleotide
438 <400> SEQUENCE: 10 18
439 tctctgacac ggcacatc

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/863,777

DATE: 06/12/2001

TIME: 14:55:27

Input Set : A:\Amseqlst.asc

Output Set: N:\CRF3\06122001\I863777.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date